

AMENDMENTS TO THE CLAIMS

1. (Currently amended): A fuel cell power generating system for generating power by electrochemical reaction of hydrogen with oxygen, comprising:

reforming means for producing a reformed gas containing hydrogen by a steam reforming reaction of a fuel;

a first power generating means adjacently located to the reforming means whose temperature is maintained in a predetermined range, for generating power by electrochemical reaction of hydrogen or hydrogen and carbon monoxide in said reformed gas with oxygen and supplying waste heat required for said steam reforming reaction and recycling an emission containing steam resulting from said power generation to said reforming means, a flow control valve ~~an amount of said waste heat~~ being controlled so as to reduce the amount of said waste heat ~~be reduced~~ if an amount of said reformed gas produced ~~supplied~~ increases and so as to ~~be increased~~ increase the amount of said waste heat if the amount of said reformed gas produced ~~supplied~~ decreases;

converting means for converting carbon monoxide in said reformed gas into carbon dioxide and hydrogen by reaction of said carbon monoxide with steam;

oxidizing means for converting carbon monoxide ejected from said converting means into carbon dioxide by oxidation; and

second power generating means for generating power by electrochemical reaction of hydrogen ejected from said oxidizing means with oxygen,

wherein an anode exhaust gas containing unreacted hydrogen from the first power generating means is supplied to the second power generating means through said converting means and said oxidizing means,

a flow control valve being controlled such that an amount of air supplied to said first power generating means is controlled so as to be decreased if an amount of said fuel supplied to the reforming means increases and so as to be increased if the amount of said fuel supplied decreases.

2. (Currently amended) A fuel cell power generating system for generating power by an electrochemical reaction of hydrogen with oxygen, comprising:

reforming means for producing a reformed gas containing hydrogen by a steam reforming reaction of a fuel;

adjacent said reforming means, a first power generating means for generating power by electrochemical reaction of hydrogen or hydrogen and carbon monoxide in said reformed gas with oxygen and supplying waste heat required for said steam reforming reaction and recycling an emission containing steam resulting from said power generation to said reforming means, a flow control valve ~~an amount of said waste heat~~ being controlled so as to reduce the amount of said waste heat ~~be reduced~~ if an amount of said reformed gas produced ~~supplied~~ increases and so as to ~~be increased~~ increase the amount of said waste heat if the amount of said reformed gas produced ~~supplied~~ decreases;;

converting means for converting carbon monoxide in said reformed gas into carbon dioxide and hydrogen by reaction of said carbon monoxide with steam; and

second power generating means for generating power by electrochemical reaction of hydrogen ejected from said converting means with oxygen,

a flow control valve being controlled such that an amount of air supplied to said first power generating means is controlled so as to be decreased if an amount of said fuel supplied to the reforming means increases and so as to be increased if the amount of said fuel gas supplied decreases.

3. (Currently amended) A fuel cell power generating system for generating power by an electrochemical reaction of hydrogen with oxygen, comprising:

reforming means for producing a reformed gas containing hydrogen by a steam reforming reaction of a fuel;

adjacent said reforming means, a first power generating means for generating power by electrochemical reaction of hydrogen or hydrogen and carbon monoxide in said reformed gas with oxygen and supplying waste heat required for said steam reforming reaction and recycling an emission containing steam resulting from said power generation to said reforming means, a flow control valve ~~an amount of said waste heat~~ being controlled so as to reduce the amount of said waste heat ~~be reduced~~ if an amount of said reformed gas produced ~~supplied~~ increases and so as to ~~be increased~~ increase the amount of said waste heat if the amount of said reformed gas produced ~~supplied~~ decreases;

converting means for converting carbon monoxide in said reformed gas into carbon dioxide and hydrogen by reaction of said carbon monoxide with steam;

separating means for separating hydrogen from an emission of said converting means; and

second power generating means for generating power by electrochemical reaction of the separated hydrogen with oxygen,

a flow control valve being controlled such that an amount of air supplied to said first power generating means is controlled so as to be decreased if an amount of said fuel supplied to the reforming means increases and so as to be increased if the amount of said fuel supplied decreases.

4. (Currently amended) A fuel cell power generating system for generating power by an electrochemical reaction of hydrogen with oxygen, comprising:

reforming means for producing a reformed gas containing hydrogen by a steam reforming reaction of a fuel;

a first power generating means adjacently located to the reforming means whose temperature is maintained in a predetermined range, for generating power by electrochemical reaction of hydrogen or hydrogen and carbon monoxide in said reformed gas with oxygen and supplying waste heat required for said steam reforming reaction and recycling an emission containing an emission containing steam resulting from said power generation to said reforming means, an amount of said waste heat being controlled so as to be reduced if an amount of said reformed gas supplied increases and so as to be increased if the amount of said reformed gas supplied decreases;

converting means for converting carbon monoxide in said emission into carbon dioxide and hydrogen by reaction of said carbon monoxide with steam;

oxidizing means for converting carbon monoxide ejected from said converting means into carbon dioxide by oxidation; and

second power generating means for generating power by electrochemical reaction of hydrogen ejected from said oxidizing means with oxygen,

wherein an anode exhaust gas containing unreacted hydrogen from the first power generating means is supplied to the second power generating means through said converting means and said oxidizing means,

a flow control valve being controlled such that an amount of air supplied to said first power generating means is controlled so as to be decreased if an amount of said fuel supplied to the reforming means increases and so as to be increased if the amount of said fuel supplied decreases.

5. (Currently amended) A fuel cell power generating system for generating power by an electrochemical reaction of hydrogen with oxygen, comprising:

reforming means for producing a reformed gas containing hydrogen by a steam reforming reaction of a fuel;

a first power generating means adjacently located to the reforming means whose temperature is maintained in a predetermined range, for generating power by electrochemical reaction of hydrogen or hydrogen and carbon monoxide in said reformed gas with oxygen and supplying waste heat required for said steam reforming reaction and recycling an emission containing an emission containing steam resulting from said power generation to said reforming means, a flow control valve an amount of said waste heat being controlled so as to reduce the amount of said waste heat be reduced if an amount of said reformed gas produced supplied increases and so as to be increased increase the amount of said waste heat if the amount of said reformed gas produced supplied decreases;

converting means for converting carbon monoxide in said emission into carbon dioxide and hydrogen by reaction of said carbon monoxide with steam; and

second power generating means for generating power by electrochemical reaction of hydrogen ejected from said converting means with oxygen,

wherein an anode exhaust gas containing unreacted hydrogen from the first power generating means is supplied to the second power generating means through said converting means,

a flow control valve being controlled such that an amount of air supplied to said first power generating means is controlled so as to be decreased if an amount of said fuel supplied to the reforming means increases and so as to be increased if the amount of said fuel supplied decreases.

6. (Currently amended) A fuel cell power generating system for generating power by electrochemical reaction of hydrogen with oxygen, comprising:

reforming means for producing a reformed gas containing hydrogen by a steam reforming reaction of a fuel;

a first power generating means adjacently located to the reforming means whose temperature is maintained in a predetermined range, for generating power by electrochemical reaction of hydrogen or hydrogen and carbon monoxide in said reformed gas with oxygen and supplying waste heat required for said steam reforming reaction and recycling an emission containing an emission containing steam resulting from said power generation to said reforming means, a flow control valve an amount of said waste heat being controlled so as to reduce the amount of said waste heat be reduced if an amount of said reformed gas produced supplied increases and so as to be increased

increase the amount of said waste heat if the amount of said reformed gas produced supplied
decreases;;

converting means for converting carbon monoxide in said emission into carbon dioxide and
hydrogen by reaction of said carbon monoxide with steam;

separating means for separating hydrogen from an emission of said converting means; and
second power generating means for generating power by electrochemical reaction of the
separated hydrogen with oxygen,

wherein an anode exhaust gas containing unreacted hydrogen from the first power
generating means is supplied to the second power generating means through said converting means,

a flow control valve being controlled such that an amount of air supplied to said first power
generating means is controlled so as to be decreased if an amount of said fuel supplied to the
reforming means increases and so as to be increased if the amount of said fuel supplied decreases.

7-11. (Canceled)

12. (Previously presented) The fuel cell power generating system as claimed in claim
1, wherein said fuel cell power generating system comprises:

means for determining whether an output power of a first power generating means increases
or decreases; and

means for decreasing an amount of air supplied to said first power generating means when
said output power of said first power generating means increases, or increasing said amount of said
air when said output power of said first power generating means decreases.

13. (Previously Presented) The fuel cell power generating system as claimed in claim 1, wherein said fuel cell power generating system comprises:

means for determining whether an output power of a second power generating means increases or decreases; and

means for decreasing an amount of air supplied to a first power generating means when said output power of said second power generating means increases, or increasing said amount of said air when said output power of said second power generating means decreases.

14. (Previously presented) A method of controlling a fuel cell power generating system as claimed in claim 1, comprising the steps of:

determining whether an output power of a first power generating means increases or decreases; and

decreasing an amount of air supplied to said first power generating means when said output power of said first power generating means increases, or increasing said amount of said air when said output power of said first power generating means decreases.

15. (Previously Presented) A method of controlling a fuel cell power generating system as claimed in claim 1, comprising the steps of:

determining whether an output power of a second power generating means increases or decreases; and

decreasing an amount of air supplied to a first power generating means when said output power of said second power generating means increases, or increasing said amount of said air when said output power of said second power generating means decreases.

16. (Previously presented) The fuel cell power generating system as claimed in claim 2, wherein said fuel cell power generating system comprises:

means for determining whether an output power of a first power generating means increases or decreases; and

means for decreasing an amount of air supplied to said first power generating means when said output power of said first power generating means increases, or increasing said amount of said air when said output power of said first power generating means decreases.

17. (Previously presented) The fuel cell power generating system as claimed in claim 2, wherein said fuel cell power generating system comprises:

means for determining whether an output power of a second power generating means increases or decreases; and

means for decreasing an amount of air supplied to a first power generating means when said output power of said second power generating means increases, or increasing said amount of said air when said output power of said second power generating means decreases.

18. (Previously presented) A method of controlling a fuel cell power generating system as claimed in claim 2, comprising the steps of:

determining whether an output power of a first power generating means increases or decreases; and

decreasing an amount of air supplied to said first power generating means when said output power of said first power generating means increases, or increasing said amount of said air when said output power of said first power generating means decreases.

19. (Previously presented) A method of controlling a fuel cell power generating system as claimed in claim 2, comprising the steps of:

determining whether an output power of a second power generating means increases or decreases; and

decreasing an amount of air supplied to a first power generating means when said output power of said second power generating means increases, or increasing said amount of said air when said output power of said second power generating means decreases.

20. (Previously presented) The fuel cell power generating system as claimed in claim 3, wherein said fuel cell power generating system comprises:

means for determining whether an output power of a first power generating means increases or decreases; and

means for decreasing an amount of air supplied to said first power generating means when said output power of said first power generating means increases, or increasing said amount of said air when said output power of said first power generating means decreases.

21. (Previously presented) The fuel cell power generating system as claimed in claim 3, wherein said fuel cell power generating system comprises:

means for determining whether an output power of a second power generating means increases or decreases; and

means for decreasing an amount of air supplied to a first power generating means when said output power of said second power generating means increases, or increasing said amount of said air when said output power of said second power generating means decreases.

22. (Previously presented) A method of controlling a fuel cell power generating system as claimed in claim 3, comprising the steps of:

determining whether an output power of a first power generating means increases or decreases; and

decreasing an amount of air supplied to said first power generating means when said output power of said first power generating means increases, or increasing said amount of said air when said output power of said first power generating means decreases.

23. (Previously presented) A method of controlling a fuel cell power generating system as claimed in claim 3, comprising the steps of:

determining whether an output power of a second power generating means increases or decreases; and

decreasing an amount of air supplied to a first power generating means when said output power of said second power generating means increases, or increasing said amount of said air when said output power of said second power generating means decreases.

24. (Previously presented) The fuel cell power generating system as claimed in claim 4, wherein said fuel cell power generating system comprises:

means for determining whether an output power of a first power generating means increases or decreases; and

means for decreasing an amount of air supplied to said first power generating means when said output power of said first power generating means increases, or increasing said amount of said air when said output power of said first power generating means decreases.

25. (Previously presented) The fuel cell power generating system as claimed in claim 4, wherein said fuel cell power generating system comprises:

means for determining whether an output power of a second power generating means increases or decreases; and

means for decreasing an amount of air supplied to a first power generating means when said output power of said second power generating means increases, or increasing said amount of said air when said output power of said second power generating means decreases.

26. (Previously presented) A method of controlling a fuel cell power generating system as claimed in claim 4, comprising the steps of:

determining whether an output power of a first power generating means increases or decreases; and

decreasing an amount of air supplied to said first power generating means when said output power of said first power generating means increases, or increasing said amount of said air when said output power of said first power generating means decreases.

27. (Previously presented) A method of controlling a fuel cell power generating system as claimed in claim 4, comprising the steps of:

determining whether an output power of a second power generating means increases or decreases; and

decreasing an amount of air supplied to a first power generating means when said output power of said second power generating means increases, or increasing said amount of said air when said output power of said second power generating means decreases.

28. (Previously presented) The fuel cell power generating system as claimed in claim 5, wherein said fuel cell power generating system comprises:

means for determining whether an output power of a first power generating means increases or decreases; and

means for decreasing an amount of air supplied to said first power generating means when said output power of said first power generating means increases, or increasing said amount of said air when said output power of said first power generating means decreases.

29. (Previously presented) The fuel cell power generating system as claimed in claim 5, wherein said fuel cell power generating system comprises:

means for determining whether an output power of a second power generating means increases or decreases; and

means for decreasing an amount of air supplied to a first power generating means when said output power of said second power generating means increases, or increasing said amount of said air when said output power of said second power generating means decreases.

30. (Previously presented) A method of controlling a fuel cell power generating system as claimed in claim 5, comprising the steps of:

determining whether an output power of a first power generating means increases or decreases; and

decreasing an amount of air supplied to said first power generating means when said output power of said first power generating means increases, or increasing said amount of said air when said output power of said first power generating means decreases.

31. (Previously presented) A method of controlling a fuel cell power generating system as claimed in claim 5, comprising the steps of:

determining whether an output power of a second power generating means increases or decreases; and

decreasing an amount of air supplied to a first power generating means when said output power of said second power generating means increases, or increasing said amount of said air when said output power of said second power generating means decreases.

32. (Previously presented) The fuel cell power generating system as claimed in claim 6, wherein said fuel cell power generating system comprises:

means for determining whether an output power of a first power generating means increases or decreases; and

means for decreasing an amount of air supplied to said first power generating means when said output power of said first power generating means increases, or increasing said amount of said air when said output power of said first power generating means decreases.

33. (Previously presented) The fuel cell power generating system as claimed in claim 6, wherein said fuel cell power generating system comprises:

means for determining whether an output power of a second power generating means increases or decreases; and

means for decreasing an amount of air supplied to a first power generating means when said output power of said second power generating means increases, or increasing said amount of said air when said output power of said second power generating means decreases.

34. (Previously presented) A method of controlling a fuel cell power generating system as claimed in claim 6, comprising the steps of:

determining whether an output power of a first power generating means increases or decreases; and

decreasing an amount of air supplied to said first power generating means when said output power of said first power generating means increases, or increasing said amount of said air when said output power of said first power generating means decreases.

35. (Previously presented) A method of controlling a fuel cell power generating system as claimed in claim 6, comprising the steps of:

determining whether an output power of a second power generating means increases or decreases; and

decreasing an amount of air supplied to a first power generating means when said output power of said second power generating means increases, or increasing said amount of said air when said output power of said second power generating means decreases.

36-47. (Canceled).